

7th Grade

1.2 +/-x/÷ Fractions Review

Adding and Subtracting Fractions

must find a Common denominator

$$1) \frac{1}{3} + \frac{6}{7}$$

$$\frac{7}{21} + \frac{18}{21}$$

$$\rightarrow \frac{25}{21}$$

$$2) \frac{1}{2} - \frac{1}{4}$$

$$\frac{3 \cdot 2}{2 \cdot 2} - \frac{5}{4} = \frac{6}{4} - \frac{5}{4}$$

$$\frac{1}{4}$$

$$3) \frac{5}{1} - \frac{2}{3} = \frac{15}{3} - \frac{2}{3} = \frac{13}{3}$$

Multiplying Fractions

rule: multiply Straight across

$$3) \frac{5}{4} \cdot \frac{2}{3} = \frac{10}{12} = \frac{5}{6}$$

$$4) 2\frac{3}{4} \cdot \frac{2}{3}$$

$$\frac{11}{4} \cdot \frac{2}{3} = \frac{22}{12} = \frac{11}{6}$$

Multiplying Fractions

- divide out common factors in the #'s diagonal from each other, then multiply straight across.

$$5) \quad 2\frac{2}{3} \cdot \frac{15}{8}$$

Handwritten work shows the mixed number $2\frac{2}{3}$ being converted to $\frac{8}{1}$ and the fraction $\frac{15}{8}$ being simplified by dividing numerator and denominator by 5 to get $\frac{3}{8}$. The final result is $\frac{5}{1}$, with the 5 circled.

$$6) \quad \frac{5}{1} \cdot \frac{3}{2} = \frac{15}{1}$$

Handwritten work shows the fraction $\frac{5}{1}$ being multiplied by $\frac{3}{2}$. The result is $\frac{15}{1}$, with the 15 circled.

Dividing Fractions

rule: keep, change, flip

$$7) \quad \frac{7}{5} \div 2\frac{1}{2} = \frac{7}{5} \cdot \frac{2}{5} = \frac{14}{25}$$

Handwritten work shows the mixed number $2\frac{1}{2}$ being converted to $\frac{5}{2}$. The division is converted to multiplication by the reciprocal: $\frac{7}{5} \cdot \frac{2}{5} = \frac{14}{25}$, with the final fraction circled.

$$8) \quad \frac{2}{1} \div \frac{16}{9} = \frac{2}{1} \cdot \frac{9}{16} = \frac{9}{8}$$

Handwritten work shows the fraction $\frac{2}{1}$ being multiplied by the reciprocal of $\frac{16}{9}$, which is $\frac{9}{16}$. The result is $\frac{9}{8}$, with the final fraction circled.

Try this:

9) $\frac{7}{8} - \frac{1}{4}$

10) $\frac{2}{3} + 1\frac{1}{8}$

11) $\frac{3}{4} \cdot \frac{12}{7}$

12) $3\frac{2}{3} \div \frac{5}{6}$

Homework

Worksheet